ABSTRACT

A catalyst structure (21) that allows a carbon nanotube having a desired shape and with larger length to be obtained in a stable manner and in high purity as well as a method of manufacturing a carbon nanotube (24) using the same are provided. The present invention relates to a catalyst structure (21) for use in manufacturing a carbon nanotube by means of vapor deposition of crystalline carbon, having a catalytic material that forms a ring or a whirl on its crystal growth surface (22), and further relates to a method of manufacturing a carbon nanotube (24) using the same. Preferably, the catalyst structure (21) is a columnar body with its upper surface serving as the crystal growth surface (22), where at least part of the side of the columnar body has a non-catalytic material that has substantially no catalytic activity with respect to the growth of the crystalline carbon.